

METHOD AND APPARATUS FOR DISCOVERING NEIGHBORS WITHIN A PICONET
COMMUNICATION SYSTEM

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Abstract of the Disclosure

10 In order to discover neighboring nodes (203, 207, 208) within a particular piconet, a first node (206) determines a list of all nodes (205-207) within its piconet (201) and then transmits to each node within the piconet, a message requiring a response. Depending upon which nodes are heard from, a list is formulated by the first node comprising those nodes neighboring the first node. In order for neighboring nodes within other piconets to “discover” the first node, the first node will also scan its environment to determine piconet identifications for other piconets, and then broadcast a “discovery” message having a piconet
15 identification of a neighboring piconet. In a similar manner, the first node will also scan its environment to determine discovery messages transmitted by other nodes, thus determining neighboring nodes outside its piconet.